

THE HOUSTON INSTRUMENT DMP-41 and DMP-42

... are the professional plotters to meet the graphics needs of large and small architectural, consulting, research, engineering and development firms. Independent or in-house drafting groups also find immediate applications for these high-quality large-format drum plotters. Utilizing C- or D-size cut sheets on the DMP-41, and A2 and A1-size sheets on the DMP-42, the Houston Instrument DMP-41 and -42 possess the reliability, versatility and precision required by professional users.

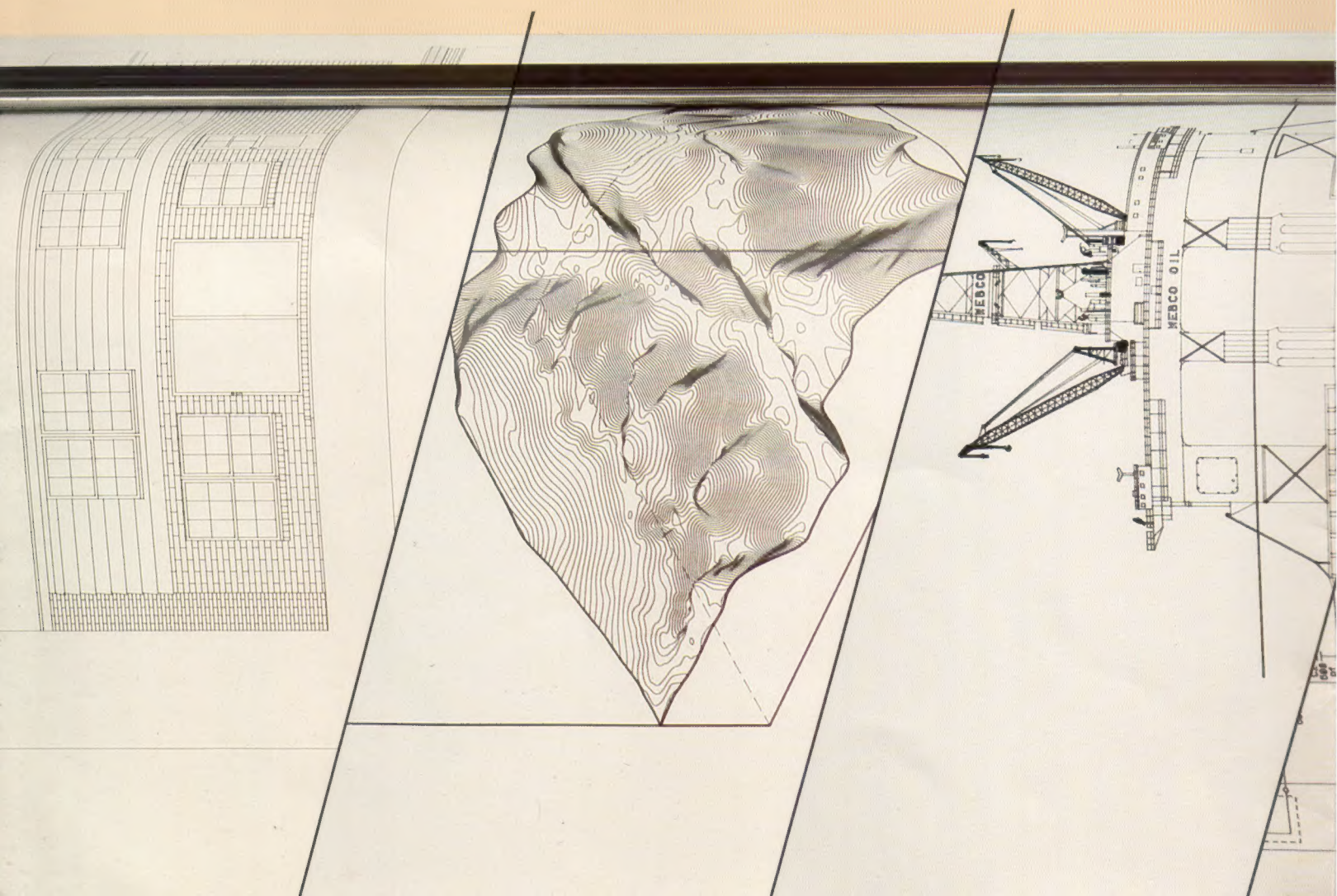
Communicating with their host via an industry-standard RS-232-C interface*, the DMP-41 and -42 can be driven by all present day micro and mini computers. In addition, the DMP-41 and -42 have the capability to interface with larger mainframe devices.

Enjoy the convenience and savings realized by having these accomplished instruments at your side. Experience the confidence provided by these solid and reliable workhorses as they plot for you on a daily basis with unerring accuracy and precision. Realize the advantages of complex and error-free drawings generated at your command. Consider the Houston Instrument DMP-41 and DMP-42 ... plotters for the professional.

* Other protocols available.

THE EXPLOSION ... in computer graphics has opened new outlets for advanced plotter technology. It is now possible for every surveying, geophysical, oceanographic, architectural and civil engineering group to reap the advantages of machine generated drawings. For example, pathways for multi-layered circuit boards can be derived by a computer, and then converted to finished artwork by the same computer driving a DMP-41. Subdivision plats, topographic maps, weather charts and piping layouts for chemical plants can all be drawn by the obedient and error-free DMP-42.

The Houston Instrument DMP-41 will utilize 17 × 22" or 22 × 34" media. The DMP-42 plots on 16.5 × 23.4" and 23.4 × 33.1", including architectural 24 × 36" media ... as you require. Utilizing a software or built-in firmware pause command, it is possible for the single-pen DMP-41 and -42 to plot in as many vivid and distinctive colors as you desire for your specific application. Taking advantage of a rapidly expanding universe of software packages available for the professional user, the DMP-41 and -42 will provide you with quality graphics for use in science, engineering, medicine and education.



The DMP-41 and DMP-42 PLOTTERS

ADJUSTABLE PEDESTALS . . . supplied with the Houston Instrument DMP-41 and -42 plotters place their working surface at desk height for easy access. Bond, vellum, clear film or synthetic plotting media are precisely registered under the moving pen by a unique high-traction surface area on the drum. Repeated shuttling serves to further impress the pattern on the media edges for exact registration during complex monochrome or multi-color drawings. Since the DMP-41 and -42 are designed to employ cut sheets, expensive perforated rolls are not required. Precise registration, provided by robust drum and pen motors, is assured when standard title block media is used. You can even direct the DMP-41 and -42 to generate their own title blocks on blank media for additional savings.

Dedicated microprocessors control the motion of both pen and drum, driving both axes in increments of only 0.005" to provide virtually step free drawings.

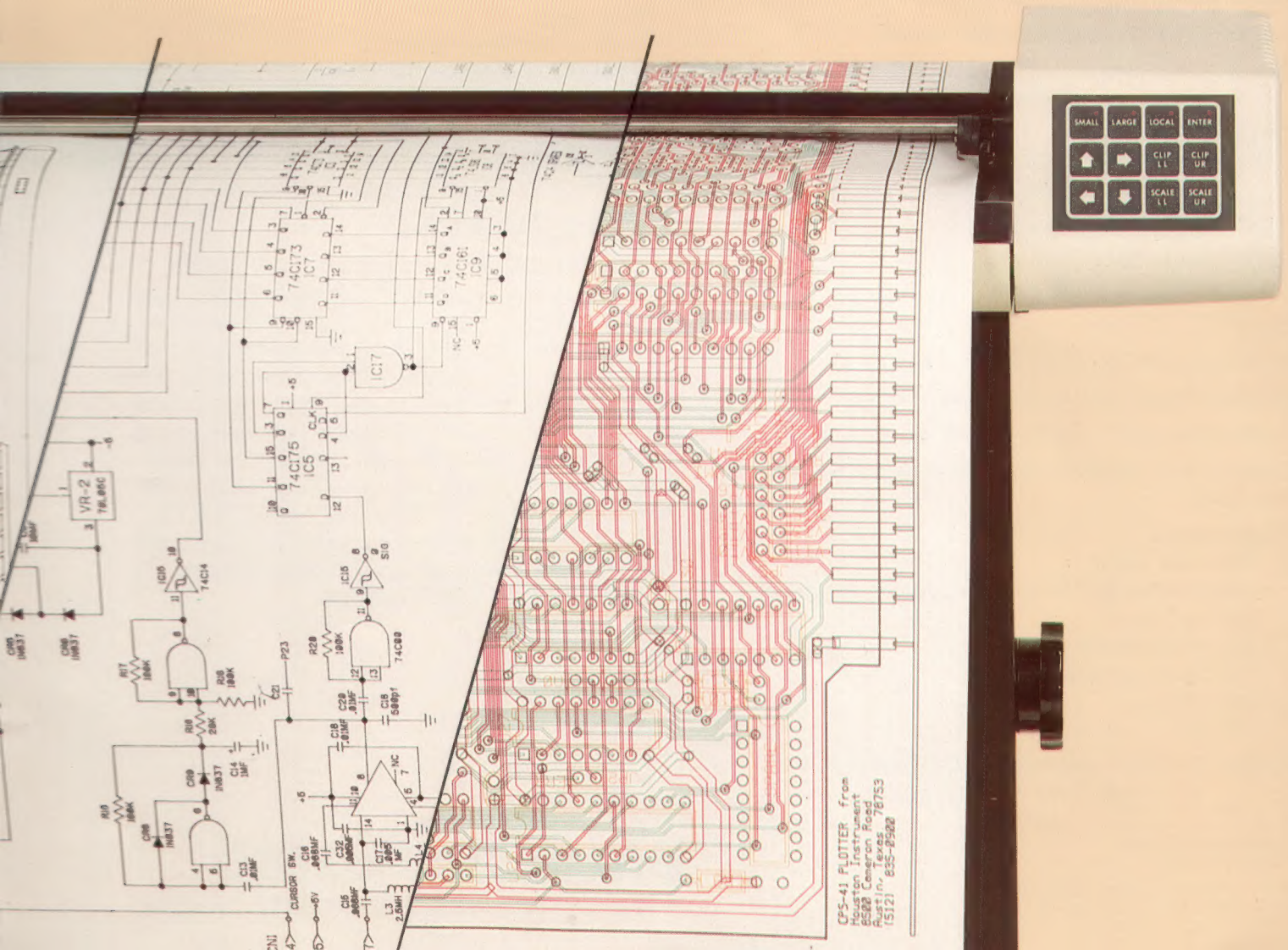
Driver design and associated logic have been perfected over the years by Houston Instrument to ensure reliable operation. Circuits have been optimized to reduce discrete component count and increase MTBF, with the benefit to you of reduced downtime and increased performance.

PROFESSIONAL SUPPORT . . . by powerful internal firmware is offered to the DMP-41 and -42 user. Residing in read-only memory (ROM), a potent instruction set enables you to generate curves, arcs, ellipses and circles of any required size using simple one-line commands. Since this 'intelligent' plotter assumes the burden of low level computing tasks, your computer is able to run at its optimum speed. Complex functions are gracefully drawn, and straight lines are traced with unswerving certainty. The net result is that drawings of surpassing quality are generated quickly and precisely.

Eleven different line types (solid, dashed and dotted) are available. The complete alphanumeric character set can be drawn at any of 360 possible angles and 255 sizes . . . either straight or italic. Aspect control is provided in which one or both axes of the character may be varied. The ability to draw only a portion of a plot and to scale drawings up or down is also resident in ROM.

To suit the professional, the Houston Instrument DMP-41 and -42 will perform reliably at user-selectable baud rates ranging from 110 to 9600.

Baud rates, as well as all other commands, are entered via front panel touch controls; only the Power switch is located on the rear panel, to prevent accidental turn off.



Specifications

Plotter:

Paper Size: DMP-41 17 × 22" (C), 22 × 34" (D).
DMP-42 16.5 × 23.4" (41.9 × 59.4 cm (A2)), 23.4 × 33.1" (59.4 × 84.1 cm (A1)), 24 × 36".

Plot Area: DMP-41 15 × 20", 20 × 32".
DMP-42 14.5 × 21.5" (36.8 × 54.6 cm), 21.5 × 31" (54.6 × 78.7 cm).

Metric Translation: Built in, selectable.

Step Size Resolution: 0.005 in (0.127 mm).

Accuracy: ±0.35% of plotted area.

Repeatability: ±0.005 in (0.127 mm).

Addressability: 0.001 in, 0.005 in, 0.1 mm.

Speed: 3 ips axial, 4.2 ips diagonal.

Media: Any bond, vellum or film.

Pen: Standard plotter hard nib or film ink. Pens easily changed for multi-color plots. Black, red, blue and green colors supplied.

Mechanical/Electrical

Drives: Permanent magnet stepper motors.

Environmental Range: 0–35° C, 5%–90% relative humidity.

Power Requirements:

Mains: 100/120/220/240 vac
46-66 Hz (1-phase), 65 watts.

Height: 32 to 36" (81.3 to 91.4 cm)*

Width: DMP-41 32¼" (81.6 cm).
DMP-42 33½" (85.1 cm).

Depth: 8.0" (20.3 cm)

Net Weight: DMP-41/42 32 lbs (14.4 kg).

Shipping Weight: DMP-41/42 37 lbs (16.7 kg).

Certifications: UL **, CSA **, FCC (Class B) **.

Controls: Front panel membrane keyboard. ON-OFF on rear panel.

Commands:

Paper size select.
Local movement (↑ ← ↓ → , pen up, pen down).
Set baud rate.
Set addressability.
Set clipping/windowing.
Set scaling.
Self test.

I/O Port: RS-232-C (standard DB-25S connector on rear panel). Other protocols available.

Firmware . . . [DM/PL III (DM/PL and DM/PL+ compatible)].

Draw Commands:

Vector generation (absolute or relative).
Arc generation.
Circle generation.
Ellipse generation.
Curve fit generation.

Text Commands:

Print mode (processes CR & LF).
93 upper and lower case characters.
Variable height.
Variable rotation.
Variable aspect ratio.
Italics (or slanted).
Special centered markers.

Pen Commands:

Pen up.
Pen down.
Line type.

Control Commands:

English or Metric addressability.
Report back.
Query plotter identification.
Windowing (clipping).
Viewport with scaling.
Internal self tests.
Handshaking.
Velocity.

Ordering Information

The **HIPLØT** DMP-41 and DMP-42 are available worldwide through a system of distributors and/or dealers. The sales office in your area will be indicated in the block below or in accompanying literature. Information is available from that office detailing additional capabilities of the DMP-41 and 42, and how you may have those capabilities demonstrated to you. For information regarding the location of domestic sales offices other than the one shown below, contact Houston Instrument, 8500 Cameron Rd., Austin, Texas 78753, 512-835-0900, 1-800-531-5205, TWX 910-874-2022. In Europe contact: Bausch & Lomb Belgium NV, Rochesterlaan 6, 8240 Gistel, Belgium, TEL 059-27-74-45, TLX 846-81399.

* Includes adjustable pedestal.

** Certification pending.

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